Scientist Recruitment Initiative RMRS RWU-4156 Proposal

Name of Proposal Contact: Dr. Carleton B. Edminster

RWU Title: RM-4156, SW Wildland-urban Interface Fuels Management and

Forest Health Restoration; RM-4651, SW Borderlands Ecosystem

Management Project

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Name and contact points of proposed position supervisor: Dr. Carl Edminster

Position title/discipline of proposed position: Research Ecologist/Forester

Brief description of proposed RWU/graduate research supported through the position:

The Forest Service supervisor and student would develop a research program directed at providing a framework for integrated understanding of the effects of alternative management practices on forest vegetation condition, fuels structures, wildlife habitats, watersheds, and soils in the Southwest, primarily in Arizona and New Mexico.

Desirable academic qualifications of the student recruit: MS and/or BS in Forestry, Ecology, Landscape Ecology, or Environmental Science, or a combination thereof. The target scientist position requires a Ph.D. with specialization in forest landscape ecology, forest vegetation dynamics, geographical statistics, and geographic information systems. Successful completion of the Ph.D. program should lead to a scientist position in RWU RM-4156 located in Flagstaff, AZ. The scientist would work with scientists in a variety of disciplines to develop integrated quantitative spatial tools for planning, implementation, and monitoring at project, forest, and regional scales. The scientist would conduct basic and applied research in the field of forest landscape ecology with emphasis on the development and application of geographical statistics and geographic information systems methodologies to natural resource management problems in the Southwest as well as research on methods for characterizing forest vegetation condition and dynamics, forest health, forest fuels, insects and disease dynamics, effects of alternative vegetation management strategies including stand density reduction and fire.

Colleges/universities (to extend beyond those already identified in the Service-wide multicultural workforce initiatives such as Historically Black Colleges and & Universities, the American Indian Higher Education Consortium, and the Persons with Disabilities Initiative) to be contacted for potential recruits/applicants: Northern Arizona University, Flagstaff, Arizona

Potential colleges/universities to provide graduate education: Northern Arizona University, Flagstaff, AZ. NAU's tradition of strong academic programs, support services, and accessible faculty just the right environment for learning. NAU combines the best aspects of a comprehensive university – highly respected career-oriented programs, a wide choice of majors, and excellent support services -- with emphasis on liberal arts and close faculty-student

interaction. NAU support services complement the academic programs, providing a healthy environment in which to learn and grow. Distinctive academic programs, coupled with caring and dedicated faculty and staff, distinguish NAU from other universities in Arizona and in the West. NAU continues to lead Arizona in the preparation of teachers and in the enrollment of Native American students. The university also is proud of its programs that are gaining in national and international recognition, such as natural resources conservation and management and the health and hospitality professions.

The School of Forestry offers one of the most unique undergraduate forestry degrees in North America. It is the only program that focuses on an interdisciplinary, team-taught immersion ecosystem-based curriculum. The School is housed in a new modern building with outstanding teaching and computer facilities USDA Forest Service Rocky Mountain Research Station Southwest Forest Science Center. Located in one of the most ecologically diverse and environmentally significant areas of the country, the School's graduate program is highly stimulating and challenging and offers a Ph.D. in Forest Science.

NAU offers on-campus housing for both single students and families. This includes special housing options for students who are more than 21 years of age or have graduate status.

Brief description of the community environment: Flagstaff, a full-service community is located in north-central Arizona. There are several institutes of higher learning in the area. Northern Arizona University and Coconino Community College are located in Flagstaff. Elementary and secondary schools are abundant. There are also private and church-affiliated schools and day care facilities. Flagstaff has a large medical community with a wide variety of specialists, several clinics, and one hospital. The city of Phoenix is about a two-hour drive away and provides a host of shopping, cultural events, and theatre opportunities. Local cultural opportunities include live theater, vocal and instrumental performances, art and history museums, ethnic festivals, a full calendar of community special events.

Flagstaff receives over 300 days of sunshine a year. Summer days are sunny, with highs usually 80-90s. Summer afternoon thunderstorms are common. Summer humidity is generally\low, and nights are pleasantly cool. In the winter it freezes at night, but during the day again with sunshine. There are usually 5-10 storms per winter, most of which deposit less than 6 inches of snow.

Recreation opportunities are extensive. Some of the best downhill and cross-country skiing is located at Snow bowl Ski Area. Grande Canyon National Park can be reached by automobile in less than two hours. The city is surrounded by surrounded by the Coconino National Forest, and the Prescott, Tonto, Kaibab, and Apache are within a short drive. The city has numerous bike paths. Many mountain biking and hiking trails are nearby. Fishing and camping opportunities are also extensive.

Proposed temporary housing options for the student while working away from the campus: Student will be provided standard per diem while in travel to field sites.

Brief explanation of how this proposal supports the scientist recruitment initiative: This
proposal directly supports the recruitment initiative because it will train a scientist for a priority
position within the Station.

Station	priority	of proposal:	Priority 1	X
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I understand acceptance of this proposal will result in a commitment to hire the student into a full-time permanent scientist position at my unit upon successful completion of the program.

/s/ Carlton B. Edminster	Project Leader	June 30, 2000
/s/ John R. Toliver for	Station Director	June 30, 2000
Signature		Date June 30, 2000